AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claims 1-12 (Canceled).

Claim 13 (Currently Amended): An artificial ~~intra-ocular~~ intraocular lens of variable optical power comprising at least two optical elements of which at least one can be shifted relative to ~~each~~ any other element ~~other~~ in a direction extending perpendicular to the optical axis when in the eye, wherein the optical elements ~~have an asymmetric surface shape and exhibit~~, in combination, ~~different optical powers at different relative positions, wherein the optical elements are each connected to an elastic haptic and an non-elastic haptic, and that the elastic haptic of one element is connected to the non-elastic haptic of the other element through a connecting anchor~~ form a lens of which the optical power varies depending on the relative position of the optical elements and wherein the shape of the surface of at least two of the optical elements includes a saddle shaped surface.

Claims 14-24 (Canceled).

Claim 25 (New): The artificial intraocular lens as claimed in claim 13, wherein at least one of the optical elements comprises a diffraction structure.

Claim 26 (New): The artificial intraocular lens according to claim 13, with at least one saddle shaped surface wherein the surface is adapted such that the combination of optical elements provides variable optical power at rotation of at least one optical element relative to at least one other optical element.

Claim 27 (New): The artificial intraocular lens according to claim 13, wherein the saddle shaped surface is according to the formula $t = A(xy^2 + x^3/3)$, with t the lens thickness of the optical element in the direction of the optical axis, x the coordinate in the direction of the motion of the optical elements, y the coordinate in the direction perpendicular to the optical axis and to the x-direction and A a constant.

Claim 28 (New): The artificial intraocular lens according to claim 13, comprising driving means adapted to execute a movement of at least one of the optical elements relative to the other element wherein the driving means are connected to the ciliary muscle of the eye.

Claim 29 (New): The artificial intraocular lens according to claim 13, comprising adjusting means wherein the adjusting means are adapted to provide adjustment of the resting state of the artificial intraocular lens.

Claim 30 (New): The artificial lens according to claim 13, wherein the optical elements are each connected to an elastic haptic and a non-elastic haptic.

Claim 31 (New): The artificial lens according to claim 30, wherein the elastic haptic of one element is connected to the non-elastic haptic of the other element through a connecting anchor.

Claim 32 (New): The artificial intraocular lens as claimed in claim 30, wherein the elastic haptics and the non-elastic haptics are connected to opposite sides of the optical elements.

Claim 33 (New): The artificial intraocular lens as claimed in claim 31, wherein the connecting anchor is adapted to be connectable to a part of the capsular bag of the eye.

Claim 34 (New): The artificial intraocular lens according to claim 13, wherein the lens is adapted to provide refractive correction of the base optical power of the eye.

Claim 35 (New): The artificial intraocular lens according to claim 13, wherein the lens is adapted to provide correction of higher order refractive errors.

Claim 36 (New): The artificial intraocular lens according to claim 13, wherein the lens is an accommodating intraocular lens.

Claim 37 (New): The artificial intraocular lens according to claim 13, wherein the lens is an adjustable intraocular lens.